EXHIBIT 8

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

LBS INNOVATIONS, LLC,	§	
Plaintiff,	§	
	§	
v.	§	Civil Action No. 2:15-cv-01972
	§	
NOKIA USA INC., et al.,	§	
Defendants.	§	

**PLAINTIFF LBS INNOVATIONS, LLC'S
DECLARATION OF SCOTT A. DENNING**

I, Scott A. Denning, do state and declare as follows:

1.   I have been retained as an expert by LBS Innovations, LLC ("LBSI") to analyze issues related to and to provide my opinions regarding claim construction of Claim 11 of U.S. Patent No. 6,091,956 ("the '956 Patent"). I make this declaration in response to Defendants' Declaration of Kenneth R. Castleman of September 23, 2016. Unless otherwise stated, the matters contained in this declaration are of my own personal knowledge and include opinions I have formed based on review of relevant materials and my professional experience. If called as a witness, I could and would testify competently to the matters set forth herein.

2.   For preparation and submission of this declaration, I am being compensated at a rate of $350.00 per hour with reimbursement of actual expenses. My opinions are in no way dependent upon or affected by my compensation.

3.   I am currently employed as an independent computer expert and consultant. My background and qualifications are set forth in my curriculum vitae, attached as Exhibit 1. As set forth in my curriculum vitae, I have a Bachelor of Science in Computer Science and over twenty-five years of professional experience in the areas of hardware design and software engineering in the fields of signal processing, robotic controls, digital video equipment design, global

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positioning system research and development, and computer networking. I am currently pursuing

my Ph.D. at the University of Colorado at Colorado Springs in Computer Science.

4.   During the past twenty-five years, I have worked as a consultant, as an expert, as

an engineer, as a software developer, as a manager, as a company executive, and as a forensic

investigator. Specific computer-related technologies that I have worked with include compilers,

programming languages, operating systems, networks, network devices such as routers and

switches, Internet, protocols, videoconferencing systems, computer hardware, and source code.

In addition, my working experience includes developing software for, among other things,

network data communications business applications, data management, database design,

client/server, compilers, parsers, user interfaces, real-time applications, artificial intelligence,

utility programs, diagnostics, machine simulators and signal processors. I have designed and

developed, as well as managed and assisted in the design and development of, computer

hardware and software systems. Some of my clients have been computer software companies,

including Apple, IBM, Hewlett-Packard, and Teradata.

5.   My experience includes decades of software development, consulting and

providing expert experience in many aspects of the computer field, from microcomputers to

supercomputers, and all areas of programming from firmware to massive client-server based

systems. I also have experience as an engineer, developer, supervisor, project manager, and

company executive, as well as experience in forensic investigation and reverse engineering.

6.   I also have many years of experience developing client-server based systems

utilizing Internet protocols. These include systems as diverse as embedded webservers on simple

8-bit microcontroller based consumer products to xml, JSON and SFTP data exchanges, and

Python and PHP dynamically generated JavaScript web pages running on military TeraFLOP

class supercomputers based on 64-bit quad-core CPUs (which I also designed).

7.   I was a Principal Engineer at Navsys Corp, where I was responsible for software

development for the Personal Guardian, a handheld mobile device that utilized a 16-bit

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microcontroller and a Novatel wireless CDPD modem to communicate via TCP/IP with the dispatch center. I was also responsible for the software development for the dispatch center, which included numerous Windows NT servers that communicated amongst themselves via winsocks (TCP/IP) utilizing HTTP, UDP, TCP, XML, and ODBC. All total there were over 1.8 million lines of code in 5 applications. I wrote all of the Personal Guardian firmware and approximately one fifth of the dispatch server code.

8. Additionally, I have many years of experience with developing mapping products and systems. I was a Systems Engineer/Software Architect for Catalina Research/DRS Technologies, where I was responsible for software development for military high-speed signal processors primarily used for radar, satellite and other communications processing. I implemented numerous dynamic data webservers on these highly specialized systems for system configuration, diagnostics, and for real-time user display. The servers were initially written in the scripting languages of Perl and Python but later moved to PHP. I also developed many remote-monitoring tools using standard web protocols, including HTTP with HTML and JavaScript along with XML and JSON data formats. I implemented many remote system controls including frequency spectrum displays and various meters and gauges as both VBX and ActiveX controls. I was engaged in reverse engineering projects involving GPS embedded mapping databases and data packets on wireless communication links with TAEUS and Purple Mountain Labs. I was also responsible for development of the Disabled American Veterans Personal Guardian emergency locator handheld device and DAV central station dispatch applications, which included geo-mapping software for displaying location of the handheld device and use of databases, and for development of the Coca-Cola Service Truck Tracking device and Central Dispatch mapping application with Navsys Corp.

9. In addition, I was the Founder, CEO, and Principal Architect at Purple Mountain Labs, where I was responsible for all hardware and software design for a prototype 256 CPU embedded supercomputer to be used on-board the Aegis destroyer as part of the Ballistic Missile

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Defense system. I designed and implemented many software modules utilizing Internet protocols including SMTP, HTTP, X-Windows, and MPI. I also wrote a demo software package providing many dynamic data components such as gauges, spectrum displays, graphs, lights, and sliding controls using ActiveX.

10.   My additional experience is listed in my curriculum vitae.

I.   Introduction

11.   My opinions are based on information I have reviewed to date, including the materials referenced in all parts of this Declaration as well as those in the Exhibits attached hereto, including the following:

- The '956 Patent;

- File history for the '956 Patent;

- The Court's previous claim construction orders in *LBSI Innovations LLC v. Aaron Bros. et al.*, Civil Action No. 2:11-cv-00142-MHS at ECF No. 195 and *LBSI Innovations LLC v. BP America, Inc., et al.*, Civil Action No. 2:11-cv-00407 at ECF No. 395;

- The parties' Joint Claim Construction Statement and supporting evidence; and

- Technical documents and references cited in this declaration, as well as those reasonably relied upon by experts in the field.

12.   I have also reviewed Dr. Castleman's declaration and exhibits attached thereto.

13.   I expect to review any rebuttal declarations or materials submitted by the defendants in response to the opinions I have provided herein. I reserve the right to supplement my declaration, as appropriate, after considering any such rebuttal materials.

II.   LEGAL STANDARD

14.   Although I am not an attorney, I have acquired some understanding of patent law from my prior experience, which is set forth above and in Exhibit 1. In addition, attorneys for

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LBSI have supplemented my existing understanding of the law. A brief summary of my current knowledge and understanding of relevant patent law is set forth below.

A.   The Level of Skill in the Art

15.   I understand from LBSI's counsel that the claims and specification of a patent are addressed to and are intended to be read by persons of skill in the art to which the patent pertains as they would be understood at the time of the filing of the patent application. I understand and have been instructed that the factors that may be considered in determining the ordinary level of skill in the art include: (a) the levels of education and experience of persons working in the field; (b) the types of problems encountered in the field; and (c) the sophistication of the technology. I understand and have been instructed that a person of ordinary skill in the art is not a specific real individual but rather a hypothetical individual having the qualities reflected by the factors discussed above.

16.   I have considered the levels of education and experience of persons working in the field based on my personal experience, having been a member of this field when the '956 Patent was filed.

17.   I have also considered the types of problems encountered in the field. In particular, I have considered which types of problems were thought to be routine problems that were solved as an ordinary part of any development project, the types of problems that would have been considered more substantial, and the solution to which would have been considered inventive.

18.   I have also considered the sophistication of the technology, including the level of sophistication of the work of the named inventor in creating his preferred embodiment. Based on my experience and my consideration of the factors above, the level of skill in the art in 1997, which is represented by the '956 Patent, is that of either (1) a Bachelor degree in computer science or computer engineering; (2) a Bachelor's degree in any engineering field with additional education or relevant experience in, for example, web browsers and Internet and networking

technologies, or experience in computer programming languages (such as PHP, C, C++, Java, SQL, HTML, and JavaScript), and web-development applications; or (3) related class work not leading to a Bachelor's degree but sufficient experience in the technologies enumerated above that together approximate the level of skill described.

19.   Having considered the factors required to determine the level of skill in the art, I disagree with Dr. Castleman that the level of one skilled in the art would have to have four or more years of post-graduate experience. First, in considering the education level of the inventor, it is my understanding that the inventor had some but not extensive knowledge of computer programming and that the inventor did not have a Bachelor's degree in computer science or engineering of any kind.

20.   Second, the type of problems encountered in this field include those discussed by the inventor of the '956 Patent. In particular, the inventor explains that at the time of the invention the need for ready sources of information regarding "specific places, events, and their details" and "information particularly relevant to a user's location such as local services information, such as transportation-system routes and schedules identifying nearby stops and other services" had increased but accessibility to this type of information was limited and did not meet the needs of the public. Col. 1:23-55. Solutions in the prior art included the "portable telephone" (Col. 2:12-16), methods using "GPS navigation systems and an on-board locator control module" (Col. 3:25-30, and "GPS navigation system with complex on-board digital map storage" with preloaded location specific information (Col. 3:35-50). As the inventor explains, "none provide the handheld computer and communications characteristics that a time and place-critical information system demands." Col. 4:28-30. Observation of the problem presented and an understanding of the prior art solutions did not require mastery of engineering.

21.   Finally, the technologies described in the '956 Patent do not require great complexity and would have been readily implemented by those with a Bachelor's degree in computer science or computer engineering or who would have otherwise had equivalent

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experience and knowledge as explained above. *See* Castleman Dec. at ¶ 6. More specifically, what is required for implementation of the claimed invention is basic working knowledge of client and server side computer programs, such as HTML, JavaScript, SQL, C++, C, Java, and PHP and the like as well as an understanding of computer networking. These are general skills that an individual with a Bachelor's degree in computer science or computer engineering or those with equivalent experience would be well familiar with and would be able to use in order to implement the claimed invention of the '956 Patent.

B.   Claim Construction

22.   The Court has previously construed certain terms of Claim 11 in its claim construction orders filed on February 14, 2012, ECF No. 195 (TXED 2:11-cv-00142) and June 20, 2013, ECF No. 395 (TXED 2:11-cv-00407). I understand that, prior to the Court's claim construction orders, in each of the previous cases the parties had proposed competing constructions for selected claim terms and that the Court's decision was based, at least in part, on the parties' competing constructions.

23.   In my analysis, I have used the Court's previous claim construction orders and have referred to these constructions where applicable.

24.   For the terms that the Court has not construed, I understand from counsel that I must consider the plain and ordinary meaning the claim terms would have to one of ordinary skill in the art in the context provided by the surrounding claim language, the other claims, the patents' specifications, and the prosecution history.

25.   I understand that the patentee is free to be his own lexicographer but any special definitions given to a term must be clearly set forth in the specification.

26.   I understand and have been instructed that claim construction is a matter of law to be performed by the court. I further understand and have been instructed that claim terms should be construed as one of ordinary skill in the art would have understood them in light of the surrounding claim language, other claims, the specification, and its file history, which are

generally referred to as intrinsic evidence. I also understand and have been instructed that cited references are considered intrinsic evidence. I also understand and have been instructed that extrinsic evidence, which is evidence outside of the file history, such as dictionaries and technical articles, may be relied upon to show, for example, how one skilled in the art would have understood the claim language at the time of the invention.

27.   In addition, I understand that a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. As such, I understand that a patent must be precise enough to afford clear notice of what is claimed in order to apprise the public of what is still open to them.

28.   However, I understand that terms of degree are not inherently indefinite. When a "word of degree" is used, I understand that the patent specification must be examined to determine whether the patent provides some standard for measuring that degree. As such, I understand that claim language employing terms of degree has long been found definite where it provides enough certainty to one of skill in the art when read in the context of the invention.

29.   I note that Dr. Castleman has asserted that certain terms of Claim 11 are indefinite. I disagree with this analysis as explained in detail below.

III.   Claim 11 Of The '956 Patent

A.   Summary of the Invention

30.   The invention disclosed in the '956 Patent relates to a "system for providing services and time-critical information about places and events" to users of computer devices. '956 Patent, Abstract. In particular, the claimed "Situation Information System" pertains to "information about events or conditions associated with places" which the user of a computer device may encounter or consider visiting. Patent, Col. 4:33–47. Claim 11 is one embodiment described in the '956 Patent and its text provides as follows:

A method of communicatively executing, including making apparent to the aural and tactile senses of the user, one or more transmittable mappable hypertext items representing people, organisms, and objects, including buildings, roads, vehicles, and signs, on a computer in a manner scalably representing interrelationships of said objects, comprising the steps of:

(a)   searching each of one or more unique mappable information code sequences, each of which said code sequences serving to uniquely represent one of said items and copied from the memory of said computer or received from an alternate source, for a field containing geographical coordinates, said each of said code sequences includes an item reference field, a name field, a location field including said geographical coordinates, and a data field,

(b)   converting said coordinates to an appropriately proportionate representation on said computer, and

(c)   displaying selectably scalably said items on said computer whereby said user may quickly receive and display timely situation information mapped in the context of spatial information, including appropriate to a geographical or other area, in which said mappable hypertext items are quickly received, mapped, and optionally executably selected by said user to provide additional of said situation information or received, stored, and transmitted by a provider of said situation information.

B.   The Importance of the Invention

31.   Geographic Information Systems (GIS) are systems for displaying useful data as it is related geographically. Modern GIS systems can display large datasets as icons on street or topographical maps, on top of satellite imagery, or any combination of these.

32.   GIS have assisted governments, businesses and individuals in identifying trends, threats, competitors, client bases, disease centers, vacation spots, and numerous other strategic data sets based on their location. Though these systems have proven to be extremely useful, prior to the invention disclosed in the '956 Patent the data being geographically displayed was static and could only be viewed by someone running the GIS software on a computer connected to the GIS database. Similar software, such as trip planning and mapping programs by various GPS manufacturers as well as Microsoft's Streets and Trips, had also existed for a number of years.

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However, all of these services lacked the ability to provide users with up-to-date information on a real-time basis. Users typically had to wait for the next release of the software to get updated information; often this would come as annual updates on a CD or DVD.

33.   The '956 Patent discloses a method that solves the problem of providing users with untimely, stale data, such as outdated weather forecasts, incorrect phone numbers, room rates, and other information about events or conditions at a location of immediate interest to the user. This solution may be provided to users at workstations as well as to mobile users receiving a map containing the timely situation information on portable electronic devices.

C.   Construction of Claim Terms

34.   As discussed above, I understand that the Court has previously construed certain terms of Claim 11 that the parties offered for construction. The Court's constructions as provided in *LBSI Innovations LLC v. BP America, Inc., et al.*, Civil Action No. 2:11-cv-00407 at ECF No. 395 are outlined below:

Term	Court's Construction
"making apparent to the aural and tactile senses of the user"	The Court has ruled that this term as used in the preamble of the claim is not a limitation.
"said computer"	"the same computer that performs the other steps recited in the claim"
"timely situation information"	"up-to-date information about an event, or a condition, occurring or about to occur at a place"
"data field"	"a field that provides: (1) information as to whether the item's symbol, icon, or name is capable of being included with other items in an executably selectable menu that appears on the user's computer display; and (2) information as to whether the item is to be included in a map displayed on the user's computer, and, if displayed, whether the item's symbol, icon, or name can be subsequently selected to provide additional information

Term	Court's Construction
	about the item"
"converting said coordinates to an appropriately proportionate representation"	"using the geographical coordinates associated with the item to generate an appropriately scaled representation of the item, which is capable of being displayed"
"displaying"	"said computer causing to appear"
"optionally executably selected by said user to provide additional of said situation information"	"displayed in a manner that permits the user to select the item so as to provide additional situation information about the item"
Step (c) of Claim 11	The Court has construed this step as follows: "(1) displaying selectably scalably said items on said computer, (2) whereby said user may, quickly, receive and display timely situation information mapped in the context of spatial information, including spatial information appropriate to a geographical or other area, and (3) whereby said mappable hypertext items are, quickly, either: (a) received, mapped, and optionally executably selected by said user to provide additional of said situation information; or (b) received by a provider of said situation information, stored by a provider of said situation information, and transmitted by a provider of said situation information"
"selectably scalably"	"capable of being chosen for adjustment in size or detail"
"mappable hypertext items"	"text or one or more symbols, displayable on a map, that can be selected to access additional information"

35.   It is my understanding that in the above captioned matter LBSI has proposed a clarifying construction for the phrase "converting said coordinates to an appropriately proportionate representation." Because Dr. Castleman has not provided an opinion regarding this phrase, I do not provide an analysis of this phrase or other terms or phrases that the parties have

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proposed for construction that were previously not construed. My opinions here, thus, are limited to a rebuttal of Dr. Castleman's analysis.

IV.   Rebuttal Opinions Regarding Definiteness of Claim 11

36.   In his declaration, Dr. Castleman provides only an opinion regarding definiteness of four phrases of Claim 11. Each of these phrases have been previously construed by the Court. *See LBSI Innovations LLC v. Aaron Bros. et al.*, Civil Action No. 2:11-cv-00142-MHS at ECF No. 195 and *LBSI Innovations LLC v. BP America, Inc., et al.*, Civil Action No. 2:11-cv-00407 at ECF No. 395 . I have considered whether Claim 11 as a whole and these phrases individually when read in light of the specification and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. I have also considered whether these claim phrases individually and, separately, Claim 11 as a whole is precise enough to afford clear notice of what is claimed in order to apprise the public of what is still open to them.

37.   After careful consideration, I have concluded that the claim phrases are not indefinite, sufficiently inform those skilled in the art about the scope of the invention, and provide clear notice of what is being claimed. A detailed discussion of my analysis of the four phrases of Claim 11 that Dr. Castleman asserts are indefinite are provided below.

A.   "to an appropriately proportionate representation" (¶ 11 of Castleman Dec.)

38.   In his declaration, Dr. Castleman appears to be stating that there is ambiguity arising from the usage of the word *proportionate* since this word can be applied to multiple relationships between items on a map and attributes of the map and display. Dr. Castleman points out three possible *proportionate* representations "[t]he item in question" may have. Specifically his choices are: the size of an item relative to the scale of the map, the relative size of one item compared to another, or the relative size of an item compared to the display screen.

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39.   One skilled in the art would know that in order to determine or specify the size of any one item on a map either at least two sets of geographical coordinates or one geographical coordinate given along with some other size parameter are required. Yet there is only a single coordinate given for each item and no size parameter is provided. As Dr. Castleman's given possibilities are all regarding a single item's size in relation to something else, none of these are even possible.

40.   Consider the following:

a.   Additionally, code 29 provides for graphically displaying on the user's display symbols and text appropriately relating to the ***items*** and in a *manner which shows each item in a measurably appropriate relation to other such items* of geographical features shown on the display in an information sequence of data elements. [21:63-22:1]

b.   All the aforementioned ***items*** are *displayed according to their geographic locations in the scale of the area to be viewed on the display*, which area to be viewed is selectable and may be zoomed in or out, for example, along with the user's location symbol. [22:51-55]

41.   One of skill in the art would know from the above excerpts, and since it is not possible to indicate a single item's size with a single set of geographical coordinates alone, the phrase *appropriately proportionate representation* can only refer to the representation of multiple items in relation to each other and "the scale of the area to be viewed" or a single item in relation to "the scale of the area to be viewed". Specifically, *proportionate* does not apply to the size of an individual item representation. This is further supported by the claim's phrase "scalably representing interrelationships" and claim 12 which states "[t]he method in claim 11

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wherein said interrelationships of said objects are distance quantities separating each of said objects…"

B.   "selectably scalably" (¶ 12 of Castleman Dec.)

42.   In his declaration, Dr. Castleman offers three possible meanings for this phrase. Specifically his choices are: the items can be selected and scaled but possibly not scaled by the user, the item is selected by the user and scaled by the system, and the item is selected by the user and scaled by the user. He opines that because there are multiple possibilities that one skilled in the art could chose when implementing this invention, this phrase is indefinite.

43.   Dr. Castleman, however, does not refer to the patent specification in order to learn the meaning of *selectably scalably*. Had he done so he would have learned that the specification actually teaches all of the possibilities he provides and clearly defines the scope of the claim.

44.   In the description of his third possibility, Dr. Castleman correctly notes that when systems display items at an increasing or decreasing scale it is known as zooming in or zooming out. According to the'956 patent, "the item name can be subsequently selected by a user to automatically provide additional information about the item, such as by enlarging the detail, called zooming in" [22:24-27]. This is very much like the first two possibilities Dr. Castleman gives. The user selects an item and the system can automatically provide more detail by zooming in.

45.   Additionally, "[a]ll the aforementioned items are displayed according to their geographic locations in the scale of the area to be viewed on the display, which area to be viewed is selectable and may be zoomed in or out" [22:51-54]. This is very much like the third possibility Dr. Castleman gives. The user selects an item and the user can zoom in and out.

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46.   Thus all of Dr. Castleman's possibilities are specifically taught within the specification. One of skill in the art would therefore know that when *items* are selected the system can perform the zooming in. When *areas* are selected, the user can perform the zooming in and zooming out.

C.   "timely situation information" (¶ 13 of Castleman Dec.)

47.   In his declaration, Dr. Castleman presents three potential problems in determining whether or not situation information is timely. Specifically he states "the '956 patent does not indicate how current the information must be (e.g., recorded within minutes, days, weeks, or centuries) in order to be timely when displayed." Additionally, he opines that if current traffic information is presented to a user at a later date, that information may or may not be deemed "timely" for that user. Furthermore, he argues that the phrase "up-to-date" is a relative term that doesn't indicate how often information must be updated, and the phrase "about to occur" does not indicate whether this includes only events occurring a few minutes after the relevant point in time, or events occurring several days later.

48.   I disagree. If the meaning of this phrase was to be determined solely on the extrinsic evidence of the least likely synonym from Dr. Castleman's 40 year old Webster's dictionary, perhaps it would be difficult for one skilled in the art to determine the extent of the invention claimed in the '956 patent. However, as the '956 patent contains numerous synonymous phrases, a list of more than twenty objects and advantages of the invention demonstrating the concept of timeliness, and a plethora of examples specifically describing what is meant by timely, one skilled in the art is informed very precisely of the invention claimed by the '956 patent.

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49.   Contrary to Dr. Castleman's first objection, the '956 patent provides specific

details regarding the issue of how current situation information must be in order to be timely

when displayed. Though Dr. Castleman suggests that "traffic, temperature and weather

information might be timely only if it is less than an hour old" this appears to be based on some

extrinsic evidence known only to himself. The '956 patent certainly doesn't present specific

measures of time for particular events in order for information concerning them to be timely.

Rather it states a specific objective concerning a number of scenarios and provides examples of

information the system would provide enabling the user to accomplish the objective.

50.   Consider the following excerpts regarding traffic,

    a.   A system for providing mobile users with a multiple-function device to

       generate time-critical situation information, such as that pertaining to

       traffic congestion, events, and emergencies, for themselves or for others at

       other locations [9:1-5].

    b.   Information particularly relevant to a user's location such as local services

       information, such as transportation-system routes and schedules

       identifying near by stops and other services, would increase their traveling

       efficiency and safety [1:51-54].

    c.   Lack of timely information about traffic congestion each year can

       cumulatively amount to several days taken from commuters' lives, as

       much as two weeks worth of eight-hour days in the largest cities, and, with

       fewer new highways under construction, the loses can be expected to rise.

       With better and more timely information about traffic, which includes

       aircraft, watercraft, etc., some traffic jams could be avoided [2:33-40].

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d.   Area services and public safety personnel could do their jobs faster and more effectively with a ready source of situation information at their fingertips. For example, traffic congestion and emergency-situation information can be provided to approaching motorists and distant emergency decision makers, respectively, by those on the scene equipped with camera and communication capabilities. Digital photographs or video recordings of the scene could be quickly transmitted to those who evaluate emergency-situation information. In the case of vehicular traffic congestion, the vehicle's location, speed, and travel-direction data could be collected and redistributed as real-time, graphical, traffic-situation information. Thus, vehicle operators could avoid traffic situations that lay in their paths. Motorists encountering accidents could transmit digital photographs to the emergency-response dispatch center. Accident victims could also record traffic-accident details, drivers involved, drivers' identification, license-plate numbers, etc., as corroborating visual information [8:7-24].

51.   From these excerpts a person skilled in the art can easily determine that timely situation information regarding traffic is information useful in helping to reduce the amount of time wasted while commuting via highway, aircraft, watercraft, etc. Specific scenarios described include information concerning transportation-system routes and schedules including near by stops, traffic congestion, highway construction, and accidents. This information is provided to commuters and approaching motorists allowing them "to avoid traffic situations that lay in their paths."

52.   Further simplified, one skilled in the art can easily determine whether traffic

information is timely or not if that information describes traffic situations that lay in the

commuter's paths, that when acted upon, allows them to increase their traveling efficiency and

safety.

53.   Consider the following excerpts regarding shopping,

a.   A situation information system which provides local or proximate

information, such as merchant's advertising messages, merchandise offers,

and tourism site information, according to mobile users' location [9:11-

14].

b.   An information system with which a shopper can better serve himself or

herself by, for example, determining product availability by querying a

store's inventory, determining the price of products using a handheld

multiple-use electronic device which includes a bar-code reading device,

and electronically paying for the selected merchandise without requiring

assistance from store personnel [9:15-22].

c.   A system for merchants, acting on a short-term basis, to communicate

special offers to customers in order to increase store traffic, reduce

inventory, and increase sales [9:23-26].

d.   Shoppers searching for price or stock information in a store must now

spend more time searching the isles for help in finding the merchandise

they seek. Clearly, useful time-critical and specific information about

stores' offerings—merchandise information—is increasingly out of reach

[1:58-63].

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e.   Their indicated position, which is conveniently tracked for them on the

store's floor plan shown in their display, would speed them on their way to

the various items they've selected for viewing [7:4-8].

f.   Such a system, which allows the store to provide its information and

message to potential customers who are opportunely traveling nearby,

stands a better chance of enticing them to visit… [7:13-16]

g.   In such a scenario, a local extranet and customer-carried display device

could provide a new type of promotion and advertising medium. For

example, knowing a person's location, the networked store could increase

customer traffic by transmitting special offers directly to the willing

customer's device. An additional benefit is that customers can receive

services like maps and other aids to help them find their way around the

store or shopping mall to the desired merchandise or store,

respectively.[7:31-40].

54.   From these excerpts a person skilled in the art can easily determine that timely

situation information regarding shopping is information allowing a customer to "better serve

himself or herself without requiring assistance from store personnel." Specific scenarios

described include information concerning advertisements and special offers, product availability,

product location, price and payment. This information is provided to online customers, on-site

customers, and potential customers who are opportunely traveling nearby.

55.   Further simplified, one skilled in the art can easily determine whether shopping

information is timely or not if that information describes product attributes such as availability,

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location, and price, that when acted upon, allows the user to increase their shopping efficiency as measured in time and money spent.

56.   Dr. Castleman's second objection appears to be regarding whether information that is currently considered timely can be considered to be timely in the future. Whether or not information is considered timely is not dependent on how much time has lapsed since the information was recorded, but rather upon whether or not the information is relevant when the user accesses it. For example, highway construction information can be relevant to those wanting or needing to travel on it for months or even years, until either the construction is complete or the user no longer wants or needs to travel on it. Traffic congestion information can be relevant to commuters for as long as the congestion lasts or the commuter remains in proximity of the congestion. Product availability, location and pricing information is relevant for as long as the product is available, at the specified location, it sells for the price given, and the user is interested in purchasing it.

57.   With his third objection concerning the use of the term "up-to-date," Dr. Castleman seems to be confusing the process of recording the state of an entity at a particular time, as is done in periodic data logging whereby observations are recorded at regular intervals and time stamped, with updating an entity's status so that it reflects the current, or possibly the most recent, state whenever the state changes.

58.   One skilled in the art would not consider "up-to-date" information to be information that was observed at an arbitrary date. Rather, they would understand "up-to-date" information to mean the most current information available in the system. As Judge Folsom found, "up-to-date" means "extending to the present time; presenting or inclusive of the latest

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facts, details etc.; employing or involving the latest methods or devices." Exhibit 2 to LBSI's

Brief at 19 (citing *Oxford English Dictionary* (2d ed. 1989)).

59.   Dr. Castleman also opines that one of skill in the art is unable to determine the

meaning of the phrase "about to occur" as it varies depending upon the context it is used in. I

disagree. Though the phrase "about to occur" may have various meanings depending upon the

unit of time used to measure whatever is at issue, such as population densities, or the change in a

mountain's elevation, when it is used in the context of the '956 patent the meaning of "about to

occur" is quite clear.

60.   Consider the following:

a.   It particularly includes events occurring or about to occur in a locus

accessible to the mobile user and to which the user may arbitrarily choose

to respond by visiting one or more of the events, avoiding them entirely,

communicating them to another person, rectifying them, or otherwise

modifying plans and itineraries in light of such events [4:40-46].

b.   a system for merchants, acting on a short-term basis, to communicate

special offers to customers in order to increase store traffic, reduce

inventory, and increase sales [9:23-25].

c.   As the user's location, shown on the display by device location and

direction symbol 6a, approaches within a selectable distance of proximate

information station 3a, proximate station banner 6d appears on display 4a,

followed by proximate merchandise banner 6e to call user's attention to,

for example, a short-term offer of merchandise which, as mappable

hypertext items, may be executably selected by user to provide additional

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information or execute as computer code as described in FIG. 12 below [13:29-38].

    d.   Should the user also wish to know, for example, what the merchant's current, short-term offers are, the user would select the menu portion entitled "1 hr. Specials" which causes sub-menu 6i to appear on the display showing categories of merchandise included in the aforementioned offers [16:27-32].

    e.   Having ready access to timely, proximate information, i.e., information particularly relevant to a user's location such as local services information, such as transportation-system routes and schedules identifying nearby stops and other services, would increase their traveling efficiency and safety [1:49-54].

    f.   a system for providing situation information, such as area maps, other users' current locations superimposed on an area map, and transportation schedules, to enhance the efficient mobility of the physically impaired and others [9:6-10].

61.   From these excerpts a person skilled in the art can easily determine that information regarding events or conditions "about to occur" is information allowing a user to "arbitrarily choose to respond by visiting one or more of the events, avoiding them entirely, communicating them to another person, rectifying them, or otherwise modifying plans and itineraries in light of such events." Specifically, the user is able to utilize transportation schedules showing stops "about to occur" when traveling. While shopping, the user is able to take advantage of short-term offers for products and services, which are "about to occur." And, the

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user is able to purchase products or services as the condition of them being in close proximity to the provider is "about to occur."

62.   Further simplified, one skilled in the art would understand that information concerning an event or condition "about to occur" as being information about an event or condition made available to the user enough time before the event or condition occurs so that they can act upon it. *See LBSI Innovations LLC v. Aaron Bros. et al.*, Civil Action No. 2:11-cv-00142-MHS, ECF No. 195 at 18; *LBSI Innovations LLC v. BP America, Inc., et al.*, Civil Action No. 2:11-cv-00407, ECF No. 395 at 15.

D.   "may quickly receive and display" (¶ 14 of Castleman Dec.)

63.   In his declaration, Dr. Castleman states that to "quickly receive and display" implies that the information is selected by the user, requested from the information source, received from the information source, and displayed to the user, all in a short period [of] time. He goes on to explain the data path and to describe how the Internet's latency is dependent upon many factors and is outside the control of the system designer, operator and user. He then states "[t]herefore one skilled in the art would be unable to determine if a specific embodiment met this "quickly" limitation."

64.   I disagree. Once again Dr. Castleman is attempting to determine the meaning of claim terms using extrinsic evidence known only to him, while the intrinsic evidence presents a very clear meaning of the phrase "may quickly receive and display" so that one skilled in the art can determine the exact limits of what is claimed by the '956 patent.

65.   Dr. Castleman incorrectly assumes that the process of "receiving" implies the steps of the user selecting information and requesting it from the information source.

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Furthermore, the time required for "receiving" does not include the latency of the information

server, the Internet, or any other network.

      66.   Consider the following teachings from the specification:

        a.   One such transceiver of subject invention provides voice communications which, because it is desirable that the form factor of the situation information device provide a usefully large display or graphical display unit (GDU), which term includes all forms of sensory media such as tactile and aural as well as visual, and militates against an integral telephone ear piece or telephone speaker and a telephone mouth piece or telephone microphone [5:47-55]

        b.   A mobile computer and wireless telephone with peripheral devices built-in, such as a telephone handset, a digital camera, and a bar-code reader would enhance visitors' exploration and enjoyment of an area [7:56-60].

        c.   With camera and bar-code reader combined with the telephone handset, users would require a single element to perform all three functions… The housing of a usefully large display could also provide convenient attachment for the removable telephone handset with integral camera and bar-code reader. Further, the radio transmitter section of the wireless telephone could be separated and located within the display section; [7:61-8:4]

        d.   a system for providing situation information received from a wireless telephone with its antenna and transceiver mounted in a handheld computer and display unit…[9:51-53]

67.   From these excerpts it is clear that the process of "receiving" in the context of the '956 patent begins with the accepting of data from the mobile device's internal wireless telephone, not with the user selecting information or even with the information server sending the data to the mobile unit.

68.   It was well known in the art that at the time of the invention the reception of data via a communication link is generally much slower than the time required to process and or display that data. It was also well known that in order to improve an online graphical system's responsiveness, frequently used graphical items can be stored in a cache on the users machine so that they only have to be received once. Web browsers, such as those by Microsoft, Netscape/Mozilla, and Apple, have utilized this method for displaying web pages with graphics since the beginning of the Internet. The '956 patent utilizes this method to minimize the amount of graphical symbol data that must be received in order to quickly display the "mappable hypertext items" shown on the displayed map.

69.   Consider the following:

    a.   In operating such a system, users of mobile devices with narrow bandwidth, i.e., slow communications devices, could receive the important subset of mapping elements for a given area quickly. For example, they could receive elements such as main roads and cities and the separation, i.e., mileages and transit time, between them with which their mobile device could compute their mileage and the estimated time before arriving. Also, the mobile device itself could store standard graphical symbols for even more rapid display of such map features in the locations specified by the downloaded mapping information [8:47-58].

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b. A distributed information system for mobile users which provides local area information, for example, map, travelers' services, and geographical features information, in a concise form suitable for rapid download and display on the user's mobile device [9:63-67].

c. Element data type 29d provides information as to whether the item's symbol, icon, or name is capable of being included with other items in a executably selectable menu which appears to pop up, that is, to quickly graphically appear adjacent to the icon or text item which was executably selected by the user, on the user's computer display… [22:15-21]

d. Concise code such as mappable code 29 is particularly suited to low bandwidth information communication systems such as those which might be found in large areas [22:32-35].

e. Device 2g receives mappable hypertext code for each item to be represented on the display, such as items 3m, 3n, 3p, 3q, and main roads. Items having standard display symbols resident in the device's memory, including storage, are called by the display program and displayed to expedite the display process by obviating transmission of that data [22:40-46].

70. From these excerpts, one skilled in the art would know that the claim limitation of "quickly receive and display" is expediting the display process by receiving graphical symbols and making them resident in the mobile device's memory so that they are subsequently available to be called by the display program and displayed without having to receive them again. This includes storing them on the mobile device.

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71.   Based on these teachings of the specification, the term quickly is objectively clear to one skilled in the art.

I do declare under penalty of perjury that the foregoing is true and correct and that I have signed this declaration on October 8, 2016.

Scott Denning
_____
Scott A. Denning

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